

CALIFORNIA ASSOCIATION OF SANITATION AGENCIES (CASA)

BEST MANAGEMENT PRACTICES FOR CENTRALIZED WASTE TREATMENT (CWT) FACILITIES (SUBCATEGORY D MULTIPLE WASTESTREAM)

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Purpose

These Best Management Practices (BMPs) have been endorsed by several major POTW's in California that currently accept CWT waste discharges. These major California POTWs have developed and adopted these BMPs to serve as guidance, and to help assure uniform compliance among POTWs in California with their mandates under the U.S. EPA pretreatment program requirements.

These requirements are designed to protect POTW wastewater treatment processes and conveyance systems; to assure compliance with the regulations governing discharge of treated effluent, water reuse, biosolids disposal/reuse, and air emissions; and to protect worker and public safety and the environment.

Acknowledgement

The following agencies participated in the development and review of this BMP.

- City of Oxnard
- County Sanitation District of Los Angeles
- City of San Jose (SJ/SC Water Pollution Control Plant)
- City of Los Angeles
- Orange County Sanitation District

Background

Centralized Waste Treatment (CWT) facilities are defined in Rule 40 CFR 437 as those that accept hazardous or non-hazardous industrial metal-bearing wastes, oily wastes and organic-bearing wastes received from off-site for pretreatment processing before discharge to a water of the U.S., or to a Publically Owned Wastewater Treatment (POTW) facility. Specifically, CWT Subcategory D dischargers are those that receive for treatment a combination of two of more any of the following three major categorical waste streams: metal-bearing wastes, oily wastes, and organic-bearing wastes.

CWTs are required to be permitted and to comply with all federal and local rules and regulations set by Rule 40 CFR 437. They are also required to meet those rules and regulations set by the local agency that owns and operates the POTW facility and administers the POTWs pretreatment program, if the CWT discharges to a POTW.

The EPA's guidance document labeled "*Small Entity Compliance Guide, Centralized Waste Treatment (CWT) Effluent Limitations and Guidelines and Pretreatment Standards (40 CFR 437) (EPA 821-B-01-003; June 2001; Version 3.0)*" sets guidance

for businesses that are subject to the Rule in complying with the national regulations and limitations set forth in the Rule.” A Subcategory D discharger must establish that its facility provides “equivalent treatment” in terms of comparable pollutant removals to the applicable treatment technologies used as the basis for the federal limitations and pretreatment standards (40 CFR 437.2).

Best Management Practices

The following summarizes the recommended Best Management Practices (BMPs) for CWT facilities discharging to California POTWs. These recommended BMPs are organized based on the following topical headings:

1. Waste Receiving Requirements
2. Treatment Requirements
3. Effluent Discharge and Sampling/Testing Requirements
4. Recommended Certification and Documentation Requirements.

1. Waste receiving requirements

- a. The waste hauler bringing waste to a CWT shall submit a Waste Manifest to the CWT upon arrival at the CWT processing facility. The Waste Manifest shall include the following minimum information:
 - i. Information as defined in Chapter 5 of Small Entity Compliance Guide, Centralized Waste Treatment (CWT) Effluent Limitations and Guidelines and Pretreatment Standards (40 CFR 437) (EPA 821-B-01-003; June 2001; Version 3.0). This shall include a date and time stamp.
- b. The following mandatory tests shall be performed for confirmation of the Waste Manifest in accordance with 40 CFR 403 General Pretreatment Regulations and the analytical methods and sampling techniques stipulated in 40 CFR 136:
 - i. Heavy Metals
 - ii. Cyanides
 - iii. Total Phenol
 - iv. Sulfides
 - v. Volatile Organic Compounds
 - vi. Oil and Grease
 - vii. Total Toxic Organics (TTOs)
 - viii. BOD and TSS
- c. Combining waste from multiple location into one tank truck (i.e. "Milk Runs") is prohibited.
- d. Additional random sampling of waste haulers by the CWT may be requested by the POTW to confirm the waste characteristics are as described in the Waste Manifest.

2. Treatment requirements

- a. The minimum required treatment shall be as specified in 40 CFR 437, and as described in the Small Entity Compliance Guide, Centralized Waste

Treatment (CWT) Effluent Limitations and Guidelines and Pretreatment Standards (40 CFR 437) (EPA 821-B-01-003; June 2001; Version 3.0).

- b. Emergency shutoff and re-routing procedures must be in place.
- c. Treatment reliability and redundancy requirements must meet. As a minimum, those that are established by the most recent version of the '*Ten-State Standards*' (*Board of State and Provincial Public Health and Environmental Managers, Health Research, Inc., Health Education Services Division*).
- d. Holding tanks for the purpose of dilution will not be allowed.
- e. A logbook shall be maintained of the operating parameters of the treatment process.

3. Effluent discharge and sampling/testing requirements.

- a. Batch discharge will be required. Continuous discharge is not permitted.
- b. The batch tanks will be continuously mixed.
- c. A representative sample will be taken and analyzed by a POTW approved, State certified laboratory, before a decision is made to discharge to the POTW sewer system. Testing shall, as a minimum, be for the following:
 - i. Local Limits as established by the POTW.
 - ii. Applicable 40 CFR 437 Categorical Limits, adjusted by the combined waste stream formula if non-regulated waste streams are discharged at the compliance point.
 - iii. Toxicity as determined by Specific Oxygen Uptake Rate (SOUR), Method 1683, EPA-821-R-01-014.
 - iv. Any other limits imposed by the POTW.
- d. The batch discharge will only be allowed if the above test results meet the applicable discharge limits.
- e. Adequate emergency shut-off/rerouting procedures must be established. Incoming wastes must be halted or diverted to storage if an emergency shutdown of the treatment system is required.
- f. If the federal or local discharge limitations are not met for a parameter other than pH, then the tank contents shall to be returned to the beginning of the treatment process train for reprocessing. If the federal or local pH limits are not met based on pH only, then the CWT Facility can add an acid or base to bring the pH into the allowable range before discharge. The POTW may have restrictions on the acid or base chemical that can be used for pH adjustment.
- g. Installation of flow metering of the discharge to the POTW is required and must be maintained and calibrated routinely by a qualified professional.

Recommended General Certification and Documentation Requirements

Documents must be developed and submitted to the POTW, and be available for the POTW to review at the CWT site all times.

Note that all documents, forms, and other submittals must be certified and stamped by a registered professional engineer in California with expertise in industrial

treatment. This list includes, but is not limited to the following.

1. Initial Certification Statement.

- a. Submit initial Certification Statement to the POTW in accordance with 40 CFR 437.41.
- b. The initial Certification Statement must be reviewed and approved by the POTW before a Permit to Discharge is granted to the CWT by the POTW.

2. Plans/Procedures

- a. Monitoring, Sampling and Testing Plan (MSTP). The MSTP shall specify: location, frequency, and methodology for all monitoring/sampling of waste received, treatment processes and performance, and treated effluent discharged to the POTW.
- b. Monitoring Plan Reporting: Monthly and annual reports shall be submitted summarizing all mandatory and self-monitoring data results.
- c. Slug Discharge Control Plan
- d. Spill Containment plan
- e. Flow Metering Plan
- f. Rainwater and Stormwater Management Plan (Note: stormwater cannot be commingled with received and/or treated CWT wastes).
- g. Solvent Management Plan
- h. Waste Minimization Plan

B. Treatment Process/Facility Information.

- a. O&M Manual
 - i. Routine O&M Procedures
 - ii. Emergency Response, Bypass, and Storage O&M Procedures
 - iii. O&M Logbook
- c. Unit process sizing and design criteria. Information shall be sufficient for independently assessing the rated treatment capacity of all unit operations, including physical dimensions, and process design criteria (e.g. hydraulic detention times, overflow rates, pollutant removals, etc.).
- c. Engineering Design Drawings (100% Design Drawings/As-built).
- d. Process and Instrumentation diagram. This shall show the following information:
 - i. Process flows for all major unit operations (routine and emergency conditions). This shall include identification of all flow and recycle streams for each treatment process
 - ii. Process monitoring parameters (location and metrics). As a minimum these shall include:
 1. Flow rates
 2. pH
 3. Temperature
 4. Others as recommended by the POTW.
- e. Wastewater Treatment Operator Requirements.
- f. Water Usage. Copies of historical water bills and/or local well records showing water usage for a five-year (5) period.

- g. Operating Records. All plant operating and performance records relating to wastewater discharge and waste manifests for up to five (5) years, monitoring, testing, and analytical results (See *Testing and Monitoring Information*, below).

C. Received Waste Documentation

- a. Comprehensive list of all generators accepted by the CWT.
- b. Waste Hauler Reports.
- c. Logbook of all prequalification for each of the CWTs clients, this includes;
 - i. Generator information
 - ii. Initial Sample information
 - iii. Requalification tests
- d. Customer Laboratory Treatability Information.

D. Testing and Monitoring Information

- a. All sampling, testing and laboratory analyses must be performed by an independent testing laboratory that is licensed and certified in California.
- b. All laboratory analytical results, including QA/QC information, shall be submitted monthly, and records maintained for a five-year period.
- c. Effluent pH recordings from the previous 180 days
- d. Flow Meter Calibration and Maintenance Reports (Note: must be signed and stamped by a registered professional engineer in California).
 - i. Flow meter locations
 - ii. Flow meter descriptions
 - iii. Flow meter system details
 - iv. Calibration methods/results
 - v. Corrective measures
- e. Discharge log (with signature(s) from responsible party at time of release from CWT facility to the POTW system.)
 - i. Time, date, and volume of when the contents from the tank are discharged to the sewer
 - ii. Signature from responsible operator
 - iii. Other observations
- f. Chain of custody forms for monitoring samples with signatures.
- g. All other sampling reports.

E. Compliance Paperwork

- a. On-site Compliance Paperwork, as required by 40 CFR Part 437.47(a)(4)
- b. Periodic Certification of equivalent treatment statement in the Self-Monitoring Report 40 CFR Part 437.41(b)
- c. Facility shall continue to submit application information on a five-year cycle, with all applicable documentation and any information pertaining to changes planned for the future years. The information provided must include changes in the nature or volume of the discharge, or anticipated customers.